considerable degree. If the active members of the chapters have a fairly clear appreciation of the meaning of the society and are conscientious in nomination and election of members, that is probably about all that can be expected. As the world in which we live to-day exists, the clever manipulator, the politician, or the man of unlimited assurance frequently fills the position of importance rather than the man of merit. Some will know the difference, but probably with the mass of people the man who has a big amount of assurance will very frequently be able to pass the counterfeit as the genuine. It is believed, however, that we ought not to be unduly discouraged by this fact, or that we should in any measure lower the standards and ideals of Sigma Xi. Even in the Church of God the saint and sinner, the genuine and the hypocrite, are associated. You will remember in the parable of the wheat and the tares that the householder commanded the servants not to attempt to separate the tares from the wheat "lest while ye gather up the tares, ye root up also the wheat with them." So in our own society it is believed that you are called to a great work, to help increase the sum of human knowledge, and one that calls for the best efforts that you can put forth. It is believed that this is a personal call to each one of you, so far as it may be possible to consecrate whatever God-given talent you possess to some earnest work toward the increase and dissemination of knowledge. It is also believed that you need not be specially concerned whether at present you can see any practical results from such discovery or not. Find the new truth, and neither you nor perhaps any one can foresee what may be its importance in the future. So do not be overanxious as to whether your research has an immediate pecuniary reward in sight. Remember that Louis Agassiz, the greatest zoologist that America has had, said that he did not have time to make money. His regular efforts brought him, however, a comfortable living and a name that will last far longer than that of most of our American multimillionaires. So my counsel to you is that this is largely a personal matter and that your main efforts are to be devoted to producing the best of which you are capable, rather than watching and criticizing the efforts or non-efforts of others. If you earnestly and faithfully attempt to live up to the pledge of this society you will have a clear conscience yourself and in the final estimate of results it is believed you will be classed with the wheat and separated from the tares.

Finally, it is my duty to read to you the pledge of the Society of the Sigma Xi, to which you are asked to assent as your names are called. There is perhaps an appropriateness in the fact that one who was a member of the first list of novitiates of the Alpha Chapter is to put this pledge to you, the youngest members of the Omega Chapter. The pledge is, "Do you hereby pledge yourself to uphold the principles of the Society of the Sigma Xi, and assume the responsibilities incumbent upon active membership therein?"

Charles S. Prosser
Ohio State University

Doctorates Conferred by American Universities

The tables here published for the seventeenth year on the doctorates of philosophy conferred by American universities show that the number of degrees this year for the first time exceeded 500, being an increase of 31 over 1913, but of only 18 over 1912. Two hundred and forty-one of the 502 degrees were in the natural and exact sciences, which is about the same proportion as for all the years covered by these sta-

TABLE I
Doctorates Conferred

	Average of 10 Years, 1898–1907	1908	1909	1910	1911	1912	1913	1914	Total for 17 Years, 1898–1914
Columbia	32.2	55	59	44	75	81	66	63	765
Chicago	35.6	54	38	42	55	57	46	61	709
Harvard	33.8	42	38	35	42	41	52	63	651
Yale	31.8	32	44	27	31	31	39	32	554
Johns Hopkins	30.5	28	27	23	28	32	32	30	505
Pennsylvania	22.5	32	29	26	29	34	31	18	424
Cornell	18.1	22	34	35	34	33	35	47	421
Wisconsin	8.6	17	16	18	23	27	19	31	237
Clark	8.7	11	9	14	16	6	16	9	168
New York	6.7	15	13	11	17	10	16	19	168
Michigan	6.9	4	13	7	6	11	15	7	132
Boston	4.4	11	13	6	13	8	9	5	109
Illinois	.5	5	4	12	11	20	20	22	99
Princeton	2.6	6	4	8	9	12	13	21	99
California	3.3	4	10	6	6	15	10	14	98
Bryn Mawr	2.1	4	2	5	5	9	3	7	56
George Wash.	2.8	3	4	4	5	2	2	5	53
Virginia	2.8	4	1	4	2	4	4	3	50
Brown	2.3	2	5	1	4	6	1	5	47
Minnesota	2.4	3	5	1	2	2	3	3	43
Stanford	1.4	2	3	5	4	4	5	5	42
Catholic	2.0	1	3	3	5	5	3	1	41
Iowa	1.1	2	0	4	3	7	3	4	34
Nebraska	2.0	2	2	1	0	3	2	3	33
Radcliffe	.6	1	2	4	0	2	6	2	23
Mass. Inst.	.3	3	0	3	2	6	1	2	20
Cincinnati	.3	0	2	2	5	3	2	2	19
Indiana	.0	3	3	0	2	4	3	4	19
Ohio	.4	0	2	0	2	5	1	2	16
Missouri	.4	3	0	2	2	1	1	2	15
Pittsburgh	.1	4	0	2	1	1	5	1	15
Washington	.7	1	0	0	2	1	3	1	15
Vanderbilt	.6	1	1	2	0	1	2	0	13
Georgetown	1.0	0	0	0	0	0	0	1	11
Colorado	.5	0	1	0	0	0	1	2	9
N. Carolina	.5	0	1	0	0	0	0	3	9
Syracuse	.2	0	2	1	2	0	0	2	9
Kansas	.3	0	0	3	1	0	0	0	7
Northwestern	.4	0	1	0	1	0	0	0	6
Tufts	.5	0	0	1	0	0	0	0	6
Wash. and Lee	.4	1	0	0	0	0	0	0	5
Lafayette	.3	0	0	0	0	0	0	0	3
Dartmouth	.1	1	0	0	0	0	0	0	2
Lehigh	.2	0	0	0	0	0	0	0	2
Tulane	.1	0	0	0	0	0	1	0	2
Total	273.0	379	391	362	445	484	471	502	5,764

tistics, during which 2,786 degrees have been conferred in the natural and exact sciences and 2,978 in the other university subjects. For several years the number of degrees in the sciences was increasing the more rapidly, but this does not hold for the past two years, the number of degrees in the sciences being about the same as in 1911, and considerably smaller than in 1912. Harvard, Columbia and Chicago conferred this year about the same number of degrees and about twice as many as Yale and Johns Hopkins. These two latter uni-

TABLE II
Doctorates Conferred in the Sciences

	Average of 10 Years, 1898–1907	1908	1909	1910	1911	1912	1913	1914	Total for 17 Years, 1898–1914	Per Cent.
Chicago	16.4	37	20	24	35	37	16	28	361	51
Columbia	13.4	21	23	11	29	36	27	21	302	39
John Hopk.	16.8	17	20	15	19	23	21	18	301	60
Cornell	10.4	15	24	27	27	28	30	36	291	69
Harvard	14.1	13	14	10	20	15	22	28	263	40
Yale	12.4	16	27	12	15	21	19	13	247	45
Penna.	9.0	18	13	12	10	9	9	5	166	39
Clark	7.7	11	8	14	16	6	13	7	152	90
Wisconsin	2.8	6	4	13	13	14	5	17	100	42
California	2.4	2	6	4	5	12	9	11	73	74
Illinois	.3	0	2	9	6	15	11	18	64	65
Michigan	2.8	1	5	1	3	8	10	5	61	46
Princeton	1.1	3	3	2	5	7	7	7	45	45
Geo. Wash.	1.7	2	2	3	4	2	1	2	33	62
Stanford	1.1	2	2	1	4	3	5	2	30	71
Brown	1.2	2	2	1	3	4	1	4	29	62
Mass. Inst.	.3	3	0	3	2	6	1	2	20	100
Minnesota	.7	1	2	1	2	2	2	3	20	47
Nebraska	1.3	1	2	1	0	0	2	1	20	61
Virginia	1.1	2	0	1	1	2	2	1	20	40
Bryn Mawr	1.0	1	0	2	1	3	0	2	19	34
New York	.6	1	3	2	1	2	3	1	19	11
Iowa	.7	0	0	2	1	3	2	2	17	50
Indiana	.0	3	3	0	2	4	1	2	15	79
Wash.	.7	1	0	0	2	1	3	1	15	100
Ohio	.4	0	2	0	2	5	0	0	13	81
Cincinnati	.1	0	1	1	4	1	2	2	12	63
Missouri	.3	2	0	2	2	0	1	1	11	73
Catholic	.5	—	2	0	1	1	0	0	9	22
Pittsburgh	.0	0	0	1	1	1	5	0	8	53
Kansas	.3	0	0	3	1	0	0	0	7	100
Vanderbilt	.3	1	1	0	0	1	1	0	7	54
Boston	.1	0	1	0	0	1	2	0	5	5
N. Carolina	.3	0	1	0	0	0	0	1	5	56
Tufts	.5	0	0	0	0	0	0	0	5	83
Northwest.	.2	0	1	0	1	0	0	0	4	67
Wash. & Lee	.3	1	0	0	0	0	0	0	4	80
Syracuse	.1	0	0	1	1	0	0	0	3	33
Colorado	.2	0	0	0	0	0	0	0	2	22
Dartmouth	.1	1	0	0	0	0	0	0	2	100
Lehigh	.2	0	0	0	0	0	0	0	2	100
Georgetown	.1	0	0	0	0	0	0	0	1	9
Lafayette	.1	0	0	0	0	0	0	0	1	33
Radcliffe	.0	0	0	1	0	0	0	0	1	4
Tulane	.0	0	0	0	0	0	1	0	1	50
Total	124.1	184	194	180	239	273	234	241	2,786	48

versities are not maintaining the position they held from 1898 to 1907. Cornell, Wisconsin, Illinois and Princeton conferred this year more degrees than ever before,

TABLE III

Doctorates Distributed According to Subjects

	Average of 10 Years, 1898–1907	1908	1909	1910	1911	1912	1913	1914	Total
Chemistry	32.3	54	43	48	68	78	68	71	753
Physics	15.5	22	25	25	33	30	22	23	335
Zoology	15.2	25	18	25	25	20	26	25	316
Psychology	13.5	23	21	20	23	29	24	12	287
Botany	12.6	11	16	10	20	30	28	34	275
Mathematics	12.1	23	14	23	25	22	21	25	274
Geology	7.1	5	13	10	15	23	14	13	164
Physiology	4.1	7	13	4	2	12	2	8	89
Astronomy	3.4	1	7	3	4	2	11	2	64
Agriculture	1.0	2	7	4	11	11	8	9	62
Bacteriology	1.4	1	5	1	4	6	3	6	40
Anthropology	1.0	4	4	2	2	0	3	2	27
Anatomy	.9	2	0	1	1	6	1	2	22
Paleontology	1.6	1	0	2	0	0	0	4	23
Pathology	.5	2	3	1	1	2	2	1	17
Engineering	.8	0	0	1	2	2	0	4	17
Mineralogy	.6	0	3	0	1	0	0	0	10
Metallurgy	.3	0	1	0	1	0	0	0	5
Geography	.1	1	1	0	1	0	1	0	5
Meteorology	.1	0	0	0	0	0	0	0	1
Total	124.1	184	194	180	239	273	234	241	2,786
English		30	28	32	35	32	42	42	241
History		32	22	25	28	20	26	36	189
Economics		17	42	7	17	26	16	27	152
Philosophy		25	15	20	26	15	22	19	142
Education		6	9	13	23	21	25	27	124
German		14	14	16	8	15	23	23	113
Latin		13	12	16	13	17	19	16	106
Sociology		6	6	14	18	12	11	22	89
Romance		12	16	6	12	15	9	15	85
Greek		13	11	5	7	5	8	10	59
Political Science		9	4	9	6	9	15	7	59
Oriental		9	15	11	1	10	8	2	56
Theology		7	2	1	7	7	6	8	38
Philol. and Com. Lit.		0	1	5	1	2	4	2	15
Law		1	0	1	2	1	1	3	9
Classical Arch		0	0	0	1	3	1	1	6
Fine Arts		0	0	0	0	1	1	1	3
Music		1	0	1	1	0	0	0	3
Total		195	197	182	206	211	237	261	1,489

the advance of the last two institutions being remarkable. Princeton conferred this year nearly as many degrees as during the ten years from 1898 to 1907, and Illinois conferred over four times as many degrees as during that period. Clark and Michigan, like Yale and the Johns Hopkins, maintained only about the place they held ten years ago. The number of degrees conferred by Harvard is larger than it has ever been, while there is a decrease at Columbia compared with the past three years.

Turning to the table referring to the degrees conferred in the sciences, we find that Chicago maintains its lead, though it was this year equalled by Harvard and surpassed by Cornell. Columbia takes the place of the Johns Hopkins University as the university having conferred the most degrees in the sciences next to Chicago, while Cornell follows very closely. In the separate sciences, chemistry, as always, is in the lead, with 71 degrees, followed by botany, with 34 degrees. The increase in the number of degrees in botany is noteworthy, it being nearly three times the average from 1898 to 1907. There were also conferred this year 9 degrees in agriculture and 6 in bacteriology. In both zoology and in mathematics 25 degrees were conferred. In subjects other than the natural sciences, English and history lead, surpassing any of the sciences except chemistry. Next in order come economics and education, each with 27 degrees, followed by German with 23 degrees and sociology with 22 degrees.

The institutions which conferred two or more degrees in a science are: *chemistry,* Harvard, 9; Cornell, 8; Columbia and Yale, 7 each; Illinois, 6; Johns Hopkins and Wisconsin, 5 each; Chicago, 4; California and Clark, 3 each; Massachusetts Institute of Technology and Stanford, 2 each; in *physics,* Cornell, 5; Johns Hopkins, 4; Wisconsin, 3; Chicago and Illinois, 2 each; in *zoology,* Cornell and Harvard, 4 each; California, Columbia, Illinois and Johns Hopkins, 3 each; in *psychology,* Chicago, 4; Clark and Cornell, 2 each; in *mathe-*

matics, Johns Hopkins, 5; Chicago, 4; Princeton, 3; Cornell, Harvard and Illinois, 2 each; in *botany,* Chicago, 10; Cornell, 7; Wisconsin, 6; Harvard, 3; Columbia and Illinois, 2 each; in *geology,* Harvard and Yale, 3 each; Chicago, Columbia and Princeton, 2 each; in *physiology,* Columbia, 2; in *agriculture,* Cornell, 4; Wisconsin, 2; in *bacterioloy,* Brown, 3; in *paleontology,* California and Chicago, 2 each; in *engineering,* Illinois, 2.

The names of those on whom the degree was conferred in the natural and exact sciences, with the subjects of their theses, are as follows:

CORNELL UNIVERSITY

Paul Johnson Anderson: The Morphology and Life History of the Chestnut Blight Fungus.

Jacob A. Badertscher: The Morphogenesis and Histogenesis of the Thymus of the Pig (*Sus scrofa*).

Harris Miller Benedict: Senile Changes in Leaves of *Vitis Vulpina* L. and certain other Plants.

Earl Whitney Benjamin: A Study of the Variation and Inheritance of the Size, Shape and Color of Eggs.

Charles Clarence Bidwell: A Comparison of Actual and Black Body Temperatures.

Forest Milo Blodgett: Perithecial Development of *Sphærotheca humuli.*

Edwin Garrigues Boring: The Sensations of the Alimentary Canal.

Thomas Roland Briggs: The Electrochemical Production of Colloidal Copper.

Jean Broadhurst: A Study of the Habitats and the Morphological and Physiological Characters of Streptococci.

Oliver Ellsworth Buckley: The Hall Effect and Allied Phenomena in Silicon.

Robert Wilbur Burgess: The Uniform Motion of a Sphere through a Viscous Liquid.

Wheeler Pedlar Davey: The Factors which Determine the Quantity of Röntgen Radiation given off by an X-ray Tube.

Jehiel Davidson: A Comparative Study of the Effect of Cumarin and Vanilin on Wheat Grown in Soil, Sand and Water Cultures.

Roland Parker Davis: Foundations for Bridges and Buildings.

Albert Watson Davison: Electrolytic Deposition of Brass on a Rotating Cathode.

John Frederic Howard Douglas: The Reluctance of Some Irregular Magnetic Fields.

Gail J. Fink: The *P, T, X* Diagrams of the Systems Ammonium Chloride-Ammonia, and Copper Sulphate-Ammonia.

Howard Brett Frost: The Relation of Temperature to Variation in Matthiola.

Mabel Ensworth Goudge: On Certain Tactual Illusions.

Charles Truman Gregory: The Downy Mildew Disease of Grapes.

Edward Sewall Guthrie: The Metallic Flavor in Dairy Products.

Lexemuel Ray Hesler: Black-rot, Leaf-spot and Canker of Pomaceous Fruits.

Robert Andrew Jehle: Brown Rot of Orchard Fruits.

Alfred Erwin Livingston: The Effect of Castration on the Weight of the Pituitary Body and other Glands of Internal Secretion in the Rabbit.

Edwin Charles Mayer: The Diffusion of Gases through the Walls of Glass and Quartz Tubes.

Emmeline Moore: Potamogetons in relation to Pond Culture.

Jay Arthur Myers: Studies on the Syrinx of *Gallus domesticus.*

William Howard Rankin: Field Studies on the Endothia Canker of Chestnut in New York State.

Fred Hoffmann Rhodes: The Fractional Crystallization of the Picrates of the Rare Earths of the Didymium Group.

Frank Elmore Rice: Studies on the Action of Erepsin.

Harold Eaton Riegger: Hydronitric Acid and Hydrazine Trinitride.

Clarence McKinlay Sherwood: A Study of Stokes' Neutral Red Reaction as Applied to the Sanitary Examination of Water.

Lucy Wright Smith: Studies of North American Plecoptera (*Pteronaricinæ* and *Perlodini*).

Ruby Green Smith: The Evolution of the Venation in the Anal Area of the Wings of Insects.

Anna Helen Tappan: Plane Sextic Curves Invariant under Birational Transformations.

Harry Boyer Weiser: Flame Reactions.

UNIVERSITY OF CHICAGO

Edwina Eunice Abbott: On the Effect of Adaptation on the Temperature Difference Limen.

Winfred McKenzie Atwood: A Physiological Study of the Germination of *Avena fatua.*

Eliot Blackwelder: Past-Cretaceous History of the Mountains of Central Western Wyoming.

J. Harlen Bretz: The Glaciation of the Puget Sound Basin.

George Smith Bryan: The Archegonium of *Sphagnum Subsecundum.*

George Damon Fuller: Evaporation and Soil Moisture in Relation to the Succession of Plant Association.

Lachlan Gilchrist: An Absolute Determination of the Viscosity of Air.

John William Edward Glattfeld: The Oxidation of d- Glucose in Alkaline Solution by Air as well as by Hydrogen Peroxide.

Edward Maris Harvey: Some Effects of Ethylene on the Metabolism of Plants.

John Benjamin Hill: The Anatomy of Six Epiphytic Species of Lycopodium.

Lee Irving Knight: A Study of Dormancy in Buds of *Liriodendron tulipifera.*

William Charles Krathwohl: Modular Invariants of Two Pairs of Cogredient Variables.

Paul Nicholas Leech: The Molecular Rearrangement of Tryaryl Methyl Hydroxylamines; a New Interpretation for the Rearrangement of Ketoxines.

Florence Anna McCormick: A Study of Symphyogyna Aspera.

Arthur Wesley Martin: Studies on Solutions in Anhydrous Formic Acid.

John Nathan Martin: Comparative Morphology of some Leguminosæ.

Maurice Goldsmith Mehl: The Phytosauria of the Rocky Mountain Region.

Wilson Lee Miser: On Linear Homogeneous Differential Equations with Elliptic Function Coefficients.

Frank Marion Morrison: On the Relation between some Important Notions of Projective and Metrical Differential Geometry.

Elton James Moulton: On Figures of Equilibrium of a Rotating Heterogeneous Fluid Body.

Loren Clifford Petry: The Anatomy of *Ophioglossum pendulum.*

Norma Etta Pfeiffer: Morphology of *Thismia* (*Bagnisia*) *americana* n. sp.

Ole Olufson Stoland: The Influence of Parathyroid Tetany on the Liver and the Pancreas.

Verne Frank Swaim: The Pressure Shift of Lines in the Spectrum of Zinc.

Charles Henry Swift: Origin and Early History of the Primordial Germ Cells in the Chick.

Ethel Mary Terry: The Velocity Coefficient of Saponification of Ethyl Acetate.

Lloyd Arthur Heber Warren: A Class of Asymptotic Orbits in the Problem of Three Bodies.

Herrick East Wilson: Evolutional Changes in the Monocyclic Crinoid Bases.

HARVARD UNIVERSITY

Edward Switzer Allen: Su alcuni Caratteri di una Serie Algebrica, e la Formola di de Jonquières per Serie qualsiasi.

Donald Clinton Barton: Arkose: Its Definition, Classification and Geologic Significance.

Sydney Adams Beggs: Certain Derivatives of Tetrabromortho-benzoquinone.

William T. Bovie: The Action of Ultra-Violet Light on Protoplasm.

Charles Franklin Brooks: The Snowfall of the Eastern United States.

Arthur Houston Chivers: The Fungus Genera *Chætomium* and *Ascotricha.*

Harry Clark: Sub-Helmholtzian Vibrations of a Rubbed String.

Farrington Daniels: An Electrochemical and Thermodynamical Investigation of Thallium Amalgams.

Harold Simmonds Davis: I. Contributions to the Determination of the Heats of Combustion of Organic Substances. II. The Effect of Gravity on the Concentration of a Solute. III. The Conductivity of Rosaniline Hydrochloride in Water and Certain Organic Solvents.

Gustave Alexander Feingold: Recognition and Discrimination.

Robert Chenault Givler: The Psycho-physiological Effects of the Speech Element in Poetry.

Rudolf William Glaser: Caterpillar Diseases with Especial Reference to the Wilt of Gipsy Moth Caterpillars.

Charles Merl Gruber: Neuro-muscular Fatigue.

Winthrop Perrin Haynes: A Contribution to the Geology of the Region about Three Forks, Montana.

Chester Elijah Kellogg: Alternation and Interference of Feelings.

Alfred Vincent Kidder: Southwestern Ceramics: their Value in reconstructing the History of the Ancient Cliff-dwelling and Pueblo Tribes. An Exposition from the Point of View of Type Distribution.

Francis Bullard Kingsbury: I. A Contribution to the Rôle of Bile in Fat Absorption. II. The Determination of Benzoic Acid in the Urines of the Rabbit and the Dog.

Clarence Cook Little: Experimental Studies on

the Inheritance of Color in Mice and their Bearing on Certain Allied Problems in Genetics.

Axel Leonard Melander: A Taxonomic Study of the Empididæ, a Family of Dipterous Flies.

William Buell Meldrum: I. A Possible Effect of an Alternating Current on Ionic Mobility. II. An Electrochemical Investigation of the Alkali Metals. III. A Contribution to the Study of Mixed Crystals.

Henry Thomas Moore: The Genetic Aspect of Consonance and Dissonance.

James Lucien Morris: Protein Metabolism of the Rat, with Special Reference to Tumor Problems.

Richard Harkness Patch: The Splitting of Aryl Carbinols under the Action of Substituting Agents.

Bradley Merrill Patten: A Quantitative Determination of the Orienting Reaction of the Blowfly Larva (*Calliphora erythrocephala* Meigen) to Light.

Rainard Benton Robbins: The Calculus of Variations as the Limit of a Problem in Minimizing an Algebraic Sum.

James Batcheller Sumner: The Formation of Urea in the Animal Body.

Walter Palmer Thompson: The Anatomy and Relationships of the Gnetales. I. The Genus *Ephedra*.

Frank Clifford Whitmore: I. The Mechanism of the Reactions of Sodium Malonic Ester with Halogenated Organic Compounds. II. Preliminary Studies of Certain Unsaturated Chlorides.

COLUMBIA UNIVERSITY

John Seaman Bates: Chemical Utilization of Southern Pine Waste.

Cora Jepson Beckwith: The Genesis of the Plasma-structure in the Eff of *Hydrachnia*.

Andrew Bender: The Preparation and Properties of Some New Derivatives of Pseudocumidine.

Laura E. W. Benedict: A Study of Bagobo Ceremonial, Magic and Myth.

Sidney Born: The Chemical Constitution of Invertase.

Albert Clarence Boyle, Jr.: Ore Deposits and Geology of the Bully Hill Mine and Its Vicinity, Shasta Co., California.

Robert P. Calvert: Dissociation Pressures of Ammonium and Tetramethyl Ammonium Halides and of Phosphonium Iodide and Phosphorus Pentachloride.

Dayton James Edwards: Compensatory Phenomena in the Distribution of the Blood during Stimulation of the Splanchnic Nerve.

Charles Reinhard Fettke: The Manhattan Schist Formation of Southeastern New York.

Fred Denton Fromme: The Morphology and Cytology of the Æcidium-cup.

Lyman Morse Kells: Complete Characterization of Dynamical Trajectories in n-space.

Louis Otto Kunkel: Physical and Chemical Factors Influencing Toxicity of Inorganic Salts to *Manilia Sitophila* Mont. Sacc.

Marguerite Thomson Lee: A Study of Modifications of the Binnet Test.

Victor Emanuel Levine: Biochemical Studies of Selenium.

Wallace A. Manheimer: Studies on the Sanitation of Swimming Pools.

Marion J. Mayo: The Relative Scholastic Ability of White and Colored Pupils in the High Schools of the City of New York.

Charles Packard: The Effect of Radium on the Development of *Nereis*.

Walter Frank Rittman: Thermal Reactions in Carbureting Water Gas.

Ernest Lyman Scott: The Content of Sugar in Blood under Common Laboratory Conditions.

Willard Lesly Severinghaus: Multiple Reflection of Short Electric Waves from Screens of Metallic Resonators.

Alfred Henry Sturtevant: The Behavior of the Chromosomes as Studied through Linkage.

UNIVERSITY OF ILLINOIS

Mikishi Abe: Statically Indeterminate Stresses in Rigidly Connected Structures of Reinforced Concrete.

William Ernest Carroll: Effect of the Amount of Protein Consumed upon Digestion and Protein Metabolism in Lambs and upon the Composition of Their Flesh and Blood.

William Walter Cort: Larval Trematodes from the North American Fresh-water Snails.

Stanley Prince Farwell: The Corona produced by Continuous Potentials.

Stanley Black Fracker: The Classification of Lepidopterous Larvæ.

John Earl Gutberlet: On the Development, Morphology and Economic Importance of Chicken Cestodes.

Harry Fielding Hadley: Phenol Extraction Methods as Applied to Coal and a Study of the Resulting Compounds.

Edward Otto Heuse: The Vapor Pressures of Aqueous Solutions of Electrolytes.

Edward August Theodore Kircher: Group Properties of the Residue Classes of Certain Kronecker Modular Systems and Some Related Generalizations in Number Theory.

Philip Augustus Lehenbauer: Growth in Relation to Temperature.

Harold Hossack McGregor: The Proteins of the Central Nervous System.

Louis Clark Mathewson: Theorems on the Groups of Isomorphisms of Certain Groups.

Earl Bowman Millard: The Hydration of Ions and the Influence of Viscosity on the Transference Number of Lithium Chloride.

Hubert Leonard Olin: The Coking of Coal at Low Temperatures with Special Reference to the Properties and the Composition of the Products.

George Wallace Sears: Atomic Weight of Tantalum.

Glenn Alfred Shook: A Determination of the Sun's Temperature.

Orrin Harold Smith: Retrograde Rays from the Cold Cathode.

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